IN THE SPECIFICATION:

Please amend the abstract as follows:

~~Fluid compositions that have enhanced thermal conductivity, up to 250% greater than their conventional analogues, and methods of preparation for these fluids are identified.~~

~~The compositions contain at a minimum, a~~ A fluid media such as oil or water, and a selected effective amount of carbon nanomaterials necessary to enhance the thermal conductivity of the fluid. One of the preferred carbon nanomaterials is a high thermal conductivity graphite, exceeding that of the neat fluid to be dispersed therein in thermal conductivity, and ground, milled, or naturally prepared with mean particle size less than 500 nm, and preferably less than 200nm, and most preferably less than 100nm. The graphite is dispersed in the fluid by one or more of various methods, including ultrasonication, milling, and chemical dispersion. Carbon nanotubes with graphitic structure is another preferred source of carbon nanomaterial, although other carbon nanomaterials are acceptable. To confer long term stability, the use of one or more chemical dispersants is preferred. The thermal conductivity enhancement, compared to the fluid without carbon nanomaterial, is ~~somehow~~ proportional to the amount of carbon nanomaterials (carbon nanotubes and/or graphite) added.

Please amend the fourth paragraph on page 1 starting at line 21 and ending on page 2, line 17 as follows:

Lubricants and coolants of various types are used in equipment and in manufacturing processes to remove waste heat, among other functions. Traditionally, water is most preferred for heat removal, however, to expand ~~it's~~ its working range, freeze depressants such as ethylene glycol and/or propylene glycol are sometimes added, typically at levels above 10% concentration by volume, for example, automotive coolant is typically a mixture of 50-70% ethylene glycol, the remainder water. The thermal conductivity of the freeze depressed fluid is then about 2/3 as good as water alone. In many processes and applications, water can not be used for various reasons, and then a type of oil, e.g. mineral oil, polyalpha olefin oil, ester synthetic oil, ethylene oxide/propylene oxide synthetic oil, polyalkylene glycol synthetic oil, etc. are used. The thermal conductivity of these

oils, is typically 0.1 to 0.17 W/m-K at room temperature, and thus they are inferior to water, with comparable thermal conductivity of 0.61 W/m-K, as heat transfer agents. Usually these oils have many other important functions, and they are carefully formulated to perform to exacting specifications for example for friction, wear performance, low temperature performance, etc. Often designers will desire a fluid with higher thermal conductivity than the conventional oil, but are restricted to oil due to the many other parameters the fluid must meet.

Please amend the third paragraph on page 8 starting at line 29 and ending on page 9, line 33 as follows:

The present invention provides a fluid containing up to 90% carbon nanomaterials. Very good results were obtained with nanomaterial loadings in a range of up to 20 percent by weight and more particularly from 0.001 to 10 percent by weight, and more typically from 0.01 to 2.5 percent by weight. Well dispersed stable nanotube/nanoparticle in oil suspensions with up to 2.5 percent by weight carbon nanomaterials resulted in surprising**ly** good enhancement of the thermal characteristics of the fluids developed according to the present invention. Preferably, a minimum of one or more chemical dispersing agents and/or surfactants is also added to achieve long term stability. The term "dispersant" in the instant invention refers to a surfactant added to a medium to promote uniform suspension of extremely fine solid particles, often of colloidal size. In the lubricant industry the term "dispersant" is generally accepted to describe the long chain oil soluble or dispersible compounds which function to disperse the "cold sludge" formed in engines. The term " surfactant" in the instant invention refers to any chemical compound that reduces surface tension of a liquid when dissolved into it, or reduces interfacial tension between two liquids or between a liquid and a solid. It is usually, but not exclusively, a long chain molecule comprised of two moieties; a hydrophilic moiety and a lipophilic moiety. The hydrophilic and lipophilic moieties refer to the segment in the molecule with affinity for water, and that with affinity for oil, respectively. These two terms are mostly used interchangeably in the instant invention. The particle-containing fluid of the instant invention will have a thermal conductivity higher than the neat fluid, in this case the term "neat" is defined as the fluid before the particles are added. The fluid can have any other chemical agents or other type particles added to it as well to impart other desired properties, e.g.

friction reducing agents, antiwear or anti-corrosion agents, detergents, antioxidants, etc. Furthermore, the term fluid in the instant invention is broadly defined to include pastes, gels, greases, foam, and liquid crystalline phases in either organic or aqueous media, emulsions and microemulsions.

Please amend the third paragraph on page 10 starting at line 18 and ending at line 24 as follows:

Furthermore, the dispersed nanomaterial solution can be pre-sheared, in a turbulent flow such as a nozzle, or high pressure fuel injector, or ultrasonic device, in order to achieve a stable viscosity. This may be desirable in the case where carbon nanotubes with high aspect ratio are used as the carbon nanomaterial source, since they will thicken the fluid but ~~**loose**~~ **lose** viscosity when exposed in turbulent flows such as engines.